

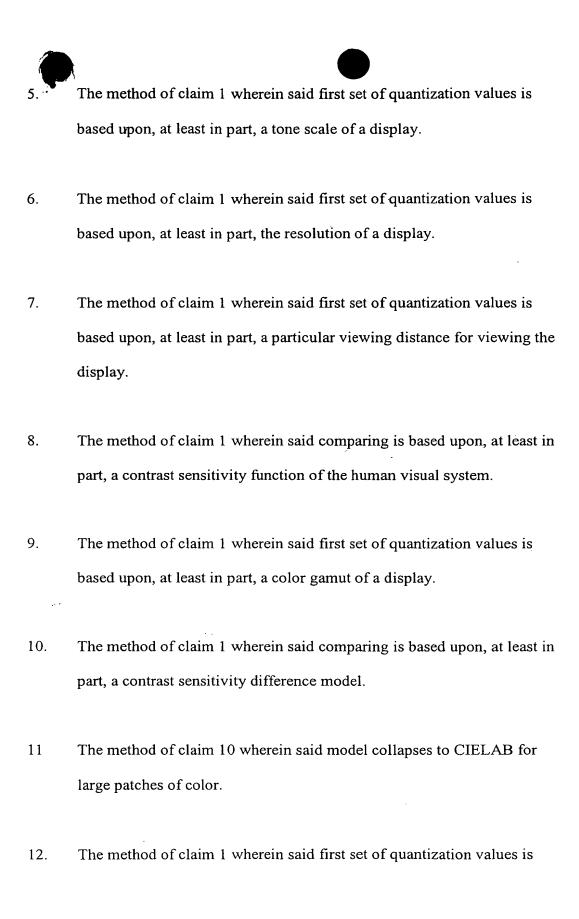
Claims:

- 1. An image encoding system comprising:
- (a) providing a first image;
- (b) quantizing a discrete cosine transform of said first image using a first set of quantization values;
- (c) quantizing said discrete cosine transform of said first image using a second set of quantization values;
- (d) comparing said first image to a spatial reconstructed image based upon said first set of quantization values using a model;
- (e) comparing said first image to a spatial reconstructed image based upon said second set of quantization values using said model;
- (f) selecting one of said first set of quantization values and said second set of quantization values based upon respective said comparing.
- 2. The method of claim 1 wherein said discrete cosine transform results in a matrix of values.
- 3. The method of claim 1 wherein said first set of quantization values is based upon, at least in part, the color primaries of a display.
- 4. The method of claim 1 wherein said first set of quantization values is based upon, at least in part, the modulation transfer function of a display.

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based upon, at least in part, viewing conditions and image-structure dependent.

13. The method of claim 1 wherein said first set of quantization values is based upon, at least in part, a luminance response of a display.

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- 14. The method of claim 1 wherein said selecting is based upon an error measure.
- 15. The method of claim 1 further comprising determining a first error measure based upon said comparing of said first set and a second error measure based upon said comparing of said second set.
 - 16. The method of claim 15 wherein said selecting is based upon said first and second error measures.
 - 17. The method of claim 16 further comprising modifying said selected set of quantization values based upon said error measure.
 - 18. The method of claim 17 further comprising modifying said image based upon said modified selected set of quantization values.
 - 19. The method of claim 18 wherein said modified image is encoded.

decreased provided said error measure is greater than a threshold.

- An image encoding system comprising:
- (a) providing a first image;
- (b) quantizing a discrete cosine transform of said first image using a first set of quantization values;
- (c) quantizing said discrete cosine transform of said first image using a second set of quantization values;
- (d) comparing said first image to a spatial reconstructed image based upon said first set of quantization values using a model to determine an error measure;
- (e) comparing said first image to a spatial reconstructed image based upon said second set of quantization values using said model to determine an error measure;
- (f) selecting one of said first set of quantization values and said second set of quantization values based upon respective said error measures;
- (g) based upon said error measure modifying a respective set of quantization values;
- (h) quantizing said discrete cosine transform of said first image using said modified set of quantization values.

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